## THE ECONOMIC POTENTIAL FROM DEVELOPING NORTH CAROLINA'S

#### **ON-SHORE AND OFF-SHORE ENERGY RESOURCES**



#### LARGE UNCERTAINTY WITH ESTIMATES

WITH PRICES

WITH AVAILABLE QUANTITIES

WITH TECHNOLOGY

WITH ENVIRONMENTAL IMPACTS



### WHAT I DID

PRICE FORECASTS FROM U.S. ENERGY DEPARTMENT AND THE WORLD BANK

RECOVERABLE OIL AND NATURAL GAS QUANTITIES FROM U.S. GEOLOGICAL SERVICE AND U.S. BUREAU OF OCEAN ENERGY MANAGEMENT

(NOTE: INTERACTION BETWEEN ECONOMICALLY RECOVERABLE QUANTITY AND PRICE)

ENVIRONMENTAL IMPACTS FROM VARIOUS SOURCES — MANY BASED ON PENNSYLVANIA EXPERIENCE



#### ESTIMATED ECONOMIC IMPACTS TO NORTH CAROLINA FROM OFF-SHORE

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Infrastructure Development			
Spending	<b>\$181 million</b> for each of 7 years		
Employment	1122 jobs for 7 years		
State and local public revenues	<b>\$11 million</b> for each of 7 years		
Production			
Spending	\$1.9 billion for each of 30 years		
Employment	<b>16,910 jobs</b> for 30 years		
State and local public revenues	\$116 million for each of 30 years		

#### ESTIMATED ECONOMIC IMPACTS TO NORTH CAROLINA FROM ON-SHORE

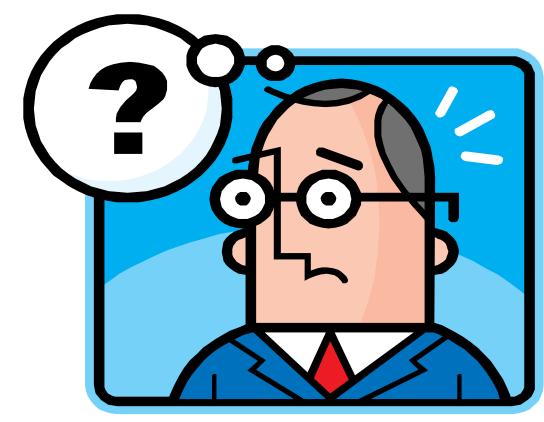
**ENERGY RESOURCE DEVELOPMENT (2012 \$)** 

Infrastructure Development	VELOTIVIETTI (EULE Ç)	
Spending	\$80 million for each of 7 years	
Employment	<b>496</b> jobs for 7 years	
State and local public revenues	<b>\$4.9 million</b> for each of 7 years	
Production		
Spending	\$158 million for each of 20 years	
Employment	<b>1406</b> jobs for 20 years	
State and local public revenues	<b>\$9.6 million</b> for each of 20 years	

## BUT RANGE OF ESTIMATES DEPENGING ON ASSUMED PRICES AND ASSUMED QUANTITIES

FOR OFF-SHORE, JOB RANGE FROM 118 TO 72,005

FOR ON-SHORE, JOB RANGE FROM 132 TO 7994



# NORTH CAROLINA ECONOMIC VALUES AT RISK FROM OFF-SHORE ENERGY DEVELOPMENT

FOR POTENTIAL AFFECTED COUNTIES

PERSONAL INCOME: \$8.5 BILLION

EMPLOYMENT: 112,435

REAL PROPERTY VALUE: \$21.2 BILLION



### RESULTS OF STUDIES LINKING ON-SHORE ENERGY RECOVERY ACTIVITIES

#### AND RESIDENTIAL PROPERTY VALUES

Study	Finding	Geographic Range
Muehlenbachs, et al.	12% reduction	Within 2 miles of wells
BBC Research and Consulting	22% reduction	Within ½ mile of wells
Boxall, et al.	4% to 16% reduction	Within 2.5 miles of wells
Integra Realty Resources	3% to 14% reduction	Within 1000 to 1500 feet of wells